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EXAMINER

DENG, ANNA CHEN

ART UNIT

PAPER NUMBER

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/787,366 | Applicant(s) EATOUGH ET AL. | |
| | Examiner ANNA DENG | Art Unit 2191 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to amendment filed on 7/7/2008.
2. The objection to Specification is withdrawn in view of applicant's amendment.
3. Claims 1-18 are pending.

Response to Amendment

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann US 2003/0018759 A1 (hereinafter Baumann), in view of Peters et al. US 6,920,555 B1 (hereinafter Peters).

Per Claim 1:

Baumann teaches **A method for writing an image to a storage device of a computer system** (Baumann, [0006], "a method and system for performing computer system cloning"), the method comprising:

receiving an image on the computer system (Baumann, [0006], "A program on a client system requests a system image and a system customization from a server system...A image file corresponding to the system image that was requested is then

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received from the server system and stored in the temporary storage space"), **wherein the computer has a current operating system and includes a hard drive** (Baumann, FIG. client system 102 (CPU), and partition in the computer system, [0009], and [0015]);

storing the image on the computer system (Baumann, [0006], "Space requirements are received from the server system and then the client system uses the space requirements to set up temporary storage space. The client system then creates the system image from the image files. ...A customization file corresponding to the requested system customization is then received from the server system and stored in the temporary storage space on the client system. The customization file is applied to the system image on the client system");

using an imaging tool (cloning tool) to write the image to the hard drive of the computer system, wherein the imaging tool uses a temporary file system to access the image, wherein the temporary file system is transparent to the imaging tool and wherein the temporary file system is not the file system of the hard drive (Baumann, FIG.2, step 210, [0015], "At step 210, the image files are clone from the temporary storage space on the client system 102 to the free space on the client system 102. This step is performed using a cloning tool on the client system 102 to restore the system image from the image files... The client system 102 is then rebooted, at step 214, and then the customizations stored in the temporary storage space are applied to the system image on the client system 102. After the customizations have been applied, step 216 is performed to remove the temporary storage space from the client system and then to format or partition the target drive on client system 102").

Baumann does not explicitly teach a hard drive **having a file system**; a temporary system is **a file system**. However, Peters teaches **a file system** (see Peters, FIG. 1, col. 4, lines 53-65, The computer system 100 includes a partitionable non-volatile storage medium 102 such as one or more magnetic or optical disks. ...The partitionable storage 102 is divided, or divisible, into partitions by use of commercially available software ...and program provided by operation system vendors such as Microsoft Corporation. Partition creation, partition and cluster resizing, file system optimization, another partition manipulations operation system, partition software...; col. 7, lines 40-44, creating a new formatted partition or extending an existing partition to place the consolidated free space thus obtained within the scope of a file system so the space can be used to hold captured migration content in one or more files; and col. 8, lines 35-39, the migration content is read back from its temporary storage location and applied to the newly image partition(s)).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Baumann to include a file system using the teaching of Peters. The modification would be obvious because one of ordinary skill in the art would be motivated to provide tools and techniques to coordinate the imaging operations with user profile migration on computer system as once suggested by Peters (Peters, col. 2, lines 11-13).

Per Claim 2:

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The rejection of claim 1 is incorporated, and Baumann further teaches **the image is stored on one or more partitions of the hard drive of the computer system without using the file system** (Baumann, FIG.2, step 210, [0015], “At step 210, the image files are clone from the temporary storage space on the client system 102 to the free space on the client system 102. This step is performed using a cloning tool on the client system 102 to restore the system image from the image files”)

Per Claim 3:

The rejection of claim 2 is incorporated, and Baumann further teaches **writing the image to the one or more partitions of the hard drive of the computer system such that the imaging tool is accessing the image from the same hard drive as it is writing the image to** (Baumann, FIG.2, step 210, [0015], “At step 210, the image files are clone from the temporary storage space on the client system 102 to the free space on the client system 102. This step is performed using a cloning tool on the client system 102 to restore the system image from the image files”, emphasis added).

Per Claim 4:

The rejection of claim 3 is incorporated, and Peter further teaches **running an imaging operating system that is different than the current operating system, wherein the imaging tool operates on the imaging operating system** (Peters, col. 3, lines 18-24, “The boot image which receives control as the result of rebooting may be read from the CD, or read from a small partition on the computer’s hard disk which is

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created for that purpose (emphasis added)"; also, col. 5, lines 6-8, "The computer system may be equipped with a boot management program that permits a user to select between two or more operating systems 104 that are installed on the computer system 104 that are installed on the computer system 100").

Per Claim 5:

The rejection of claim 4 is incorporated, and Peters further teaches **the imaging operating system comprises DOS** (see Peters, col. 5, lines 3, and col. 11, lines 59, DOS).

Per Claim 6:

The rejection of claim 5 is incorporated, Peters teaches **the temporary file system** (Peters, col. 7, lines 40-44, creating a new formatted partition or extending an existing partition to place the consolidated free space thus obtained within the scope of a file system so the space can be used to hold captured migration content in one or more files; and col. 8, lines 35-39, the migration content is read back from its temporary storage location and applied to the newly image partition(s)); and Baumann further teaches the temporary file system **is implemented at the BIOS level through use of an interrupt** (Baumann, FIG.2, step 214, [0015], "The client system 102 is then rebooted, at step 214, and then the customizations stored in the temporary storage space are applied to the system image on the client system 102").

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Per Claim 7:

The rejection of claim 1 is incorporated, and Baumann further teaches **sending the image from an administrative system** (server system 104) to the computer system (client system 102) (Baumann, FIG. 1, [0009], "The client systems 102 are coupled to a server system 104 via a network 106", also FIG. 2, step 208, [0015], "Next, at step 208, the image files corresponding to the requested system image are transferred, for the storage device 108 connected to the server system 104, to the temporary storage space on the client system 102 that was created at step 206").

Per Claim 8:

The rejection of claim 7 is incorporated, and Peters further teaches **the image is multicast by the administrative system** (Peters, col. 3, lines 6-17, "Migration code may reside in various computer readable media ... for instance, files on a bootable CD, files in the new image on the computer's disk, and/or command files for network management tools...").

Per Claim 9:

The rejection of claim 2 is incorporated, and Peter further teaches **the image is stored on an unformatted partition of the hard drive and on the final sectors of the unformatted partition** (Peters, FIG. 1, Memory 112, col. 4, lines 32-37, "memory 112 and may include other forms of memory 112 such as ROM or PROM", also, col. 7,

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lines 50-61, "Expressly defined migration content partitions are preferred over implicit migration content partitions...").

Per Claims 10-14:

These are computer-readable medium versions of the claimed method discussed above (claims 1, 5-7, and 9), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also obvious.

Per Claims 15-18:

These are system versions of the claimed method discussed above (claims 1, 5-6, and 9), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also obvious.

Response to Arguments

6. Applicant's arguments filed 7/7/2008 have been fully considered but they are not persuasive.

Applicant argued:

Claim 1 recites "using an imaging tool to write the image to the hard drive of the computer system, wherein the imaging tool uses a temporary file system to access the image." Baumann, alone or in combination with Peters, does not teach or suggest this subject matter.

Examiner response:

The combination of Baumann and Peters does teach using an imaging tool to write the image to the hard drive of the computer system, wherein the imaging tool uses a temporary file system to access the image (Baumann, FIG.2, step 210, [0015], "At step 210, the image files are clone from the temporary storage space on the client system 102 to the free space on the client system 102. This step is performed using a cloning tool on the client system 102 to restore the system image from the image files; also, see Peters, FIG. 1, col. 4, lines 53-65, The computer system 100 includes a partitionable non-volatile storage medium 102 such as one or more magnetic or optical disks. ...The partitionable storage 102 is divided, or divisible, into partitions by use of commercially available software ...and program provided by operation system vendors such as Microsoft Corporation. Partition creation, partition and cluster resizing, file system optimization, another partition manipulations operation system, partition software...; col. 7, lines 40-44, creating a new formatted partition or extending an existing partition to place the consolidated free space thus obtained within the scope of a file system so the space can be used to hold captured migration content in one or more files; and FIG. 2, col. 8, lines 35-39, the migration content is read back from its temporary storage location and applied to the newly image partition(s)), the combination of Baumann and Peters teaches cloning tool (imaging tool) uses the temporary storage space (file system) to access the image that read on the limitations of claim 1 in the present application.

Applicant argued:

Claim 1 further recites “a temporary file system [that] is transparent to the imaging tool.” Baumann, alone or in combination with Peters, Does not teach or suggest this subject matter.

Examiner response:

The combination of Baumann and Peters teaches a temporary file system (storage space) is transparent to the imaging tool because the temporary file system does not need to have any knowledge (transparent) about the temporary file system.

Applicant argued:

Claim 1 also recites use of a “temporary file system [that] is ... not the file system of the hard drive.” Baumann, alone or in combination with Peters, does not teach or suggest this subject matter.

Examiner response:

Nowhere Baumann and Peters teaches the temporary file system is the file system of the hard drive. In fact, the temporary file system (storage space) will be retuned to the other partitions or making it available for use by the user in a new partition from which the image (migration content) has been deleted (see Baumann, [0006], The customization file is applied to the system image on the client system and

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then the temporary storage space is deleted; also see Peters, col. 8, lines 60-64). Here, the temporary file system can be release after the image tool accessed the image files, and thus it is not the file system of the hard drive.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Deng whose telephone number is 571-272-5989. The examiner can normally be reached on Monday to Friday 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anna Deng/

Examiner, Art Unit 2191

10/16/2008

/Wei Y Zhen/

Supervisory Patent Examiner, Art Unit 2191